



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,213	11/25/2003	Nyle Elliott	A-8730	4978
20741 7590 08/03/2009 HOFFMAN WASSON & GITLER, P.C. CRYSTAL CENTER 2, SUITE 522 2461 SOUTH CLARK STREET ARLINGTON, VA 22202-3843				
EXAMINER				
MENDEZ, MANUEL A				
ART UNIT		PAPER NUMBER		
3763				
MAIL DATE		DELIVERY MODE		
08/03/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/720,213

**Applicant(s)**

ELLIOTT ET AL.

**Examiner**

Manuel A. Mendez

**Art Unit**

3763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

### DETAILED ACTION

During preparations to allow this application, the examiner conducted a search that located pertinent subject matter to the prosecution of this application. Accordingly, in order to expedite the prosecution of this application, the examiner invites applicant to provide comments pertaining to the following obviousness rejection and the newly found reference.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-4, 7, and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kelly** (US 4,547,187) in view of **Thornton** (US 6,811,559), **Meythaler** et al. (US 6,682,508; hereafter Meythaler), **Stone** (US 5,293,875), **Binard** et al. (US 3,860,007; Binard), and in further view of **Hammerschmidt** et al. (US 4,751,924; hereafter Hammerschmidt).

The Kelly patent discloses a lumen having a proximate end and a distal end, and inflatable cuff surrounding the lumen, the lumen having a first and second conduit, the first conduit in communication with the inflatable cuff, the second conduit in fluid communication with the proximate end of the lumen, a port at an end of the first conduit, and a one way valve in the port.

The Kelly patent does not disclose the use of filters at the distal and proximal ends. However, the Thornton patent demonstrates that it is conventional in the art to design catheters with hydrophobic tips; furthermore, in relation to the use of filters in combination with infusion ports, Meythaler demonstrates that such use is well known in the art. Importantly, Stone

demonstrates that the use of hydrophobic and charcoal filters in combination with filters is also well known in the art.

In relation to the amended language in claims 1 and 7, in figure 7, Binard, et al., demonstrates the conventionality of severing the proximal section of a catheter shaft when the inflation lumen becomes obstructed. Based on the above observations, for a person of ordinary skill in the art, the modification of the Kelly catheter with hydrophobic or charcoal filters positioned at the proximal or distal ends of said catheter and the step of severing the proximal end to deflate the balloon would have been considered obvious in view of the conventionality of these enhancements.

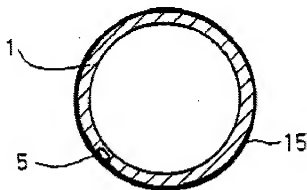
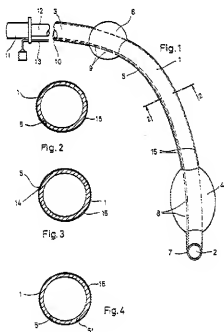
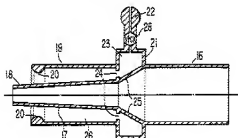


Fig. 2

FIG. 10.



Finally, concerning the one-way valve in fluid communication with the inflatable cuff, the **Hammerschmidt** patent shows in figure 10 a balloon catheter having a one-way valve (28) in fluid communication with an inflatable cuff or balloon (4, 6) via lumen (5). This particular catheter is composed of a balloon catheter (1) and a connector (Fig .10) that is joined to the proximal end of the balloon catheter (1) during use. When the balloon catheter and the connector are connected together to form the overall catheter system, air is infused through the one-way valve (28) to inflate the balloons and create a seal. Importantly, after inflation of the balloons, the only way to deflate the balloons is to break apart or disconnect the connector from the balloon catheter.

Based on the above observations, for a person of ordinary skill in the art, modifying the apparatus disclosed by Kelly with a one-way valve, as taught by **Hammerschmidt**, would have been considered obvious in view of the conventionality of this enhancement, and more importantly, because such enhancement would have improved patient safety by ensuring rapid deflation of inflatable balloons during surgical procedures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manuel A. Mendez whose telephone number is 571-272-4962. The examiner can normally be reached on 0730-1800 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nicholas D. Lucchesi can be reached on 571-272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Manuel A. Mendez/

Primary Examiner, Art Unit 3763

Manuel A. Mendez  
Primary Examiner  
Art Unit 3763

MM